

New and little known species of *Aphodiinae* from China (*Coleoptera: Scarabaeoidea*)

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Abstract. *Aphodius* (*Aparammoecius*) *gansuensis* sp. nov. and hitherto unknown male of *Aegialia shashi* STEBNICKA are described and illustrated, the affinities with related species are discussed.

Key words: *Scarabaeoidea*, *Aphodiinae*, new species, taxonomy, China.

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This paper results from examination of specimens collected by Dr. A. SMETANA and kindly submitted to me for identification in Ottawa by Dr. H. F. HOWDEN. The material is deposited in the Canadian Museum of Nature (CMN) and in the Institute of Systematics and Evolution of Animals (ISEA), Polish Academy of Sciences, Kraków.

Aegialia shashi STEBNICKA, 1977

(Figs 1, 2)

Aegialia (*Silluvia*) *shashi* STEBNICKA 1977: 421, 429, figs 24, 67.

Silluvia shashi: M. DELLACASA, 1988: 264.

M a t e r i a l. 2 specimens: China, Sichuan, Gongga Shan, above Camp 3, 3050 m, 22.vii.1994, A. SMETANA (CMN, ISEA).

C o m p l e m e n t a r y d e s c r i p t i o n. Male. Frontal suture distinctly impressed, clypeal punctures finer and less close than in female; under side of protibia with three denticles, terminal spur hooked inwardly; basal segment of metatarsus about 1/4 shorter than upper tibial spur and shorter than following three tarsal segments combined; genitalia as in Fig. 2.

R e m a r k s. *Aegialia shashi* was originally described from Sichuan, Omeishan, 2100-3100 m, on the basis of a single female specimen. The species is most closely related to *Aegialia sinica* STEBNICKA (type locality: Omeishan, 2100-3100 m), but it differs from that species by its larger size, deeper and larger punctures of the pronotum and slender elytra. *Aegialia sinica*, while obviously belonging to the *Silluvia*-group, is intermediate in form between *Silluvia* and *Psammoporus*-group of species, having the relatively short, arcuate elytra with a more pronounced striae similar to those of *Psammoporus*.

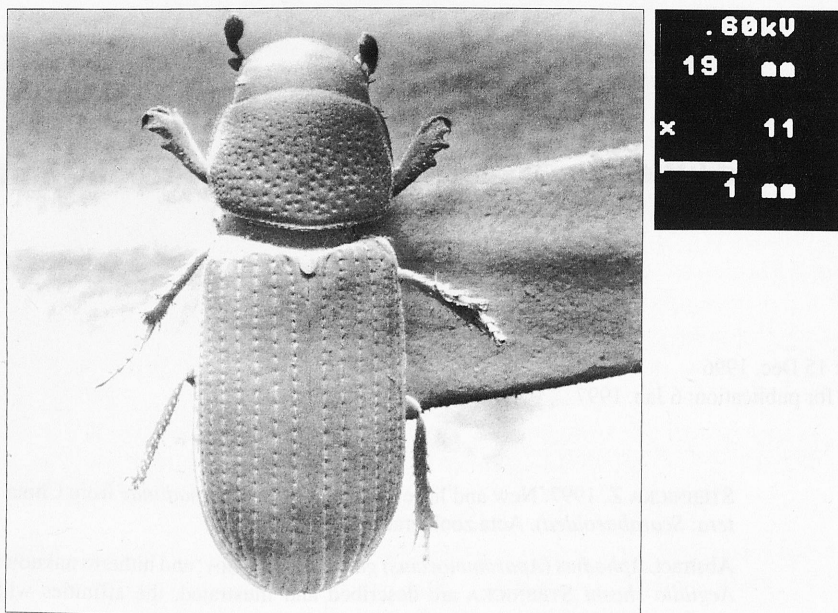


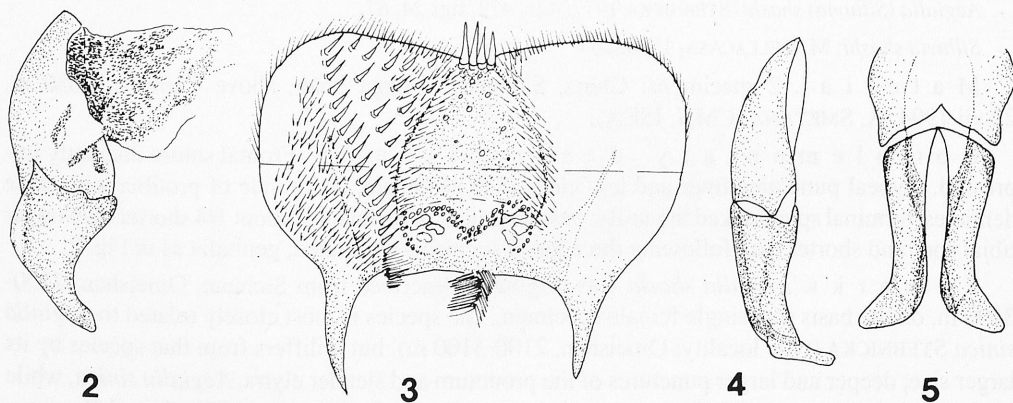
Fig. 1. *Aegialia shashi* STEBNICKA, male: habitus

***Aphodius (Aparammoecius) gansuensis*, sp. nov.**

(Figs 3-5)

H o l o t y p e, male: China, Gansu, Xinlong Shan, 70 km S Lanzhou, 2225-2380 m, 7.viii.1994, A. SMETANA, in CMN. Paratype, female, same data as holotype, in ISEA.

D e s c r i p t i o n. Length 4.2-4.3 mm, greatest width 1.7-1.8 mm. Body oblong oval, moderately convex, subopaque, apex of elytra minutely pubescent; colour piceous, elytral suture and apex reddish. Head moderate in size, slightly convex medially, clypeal margin sharply toothed



Figs 2-5. 2 – *Aegialia shashi* STEBNICKA: male genitalia in lateral view. 3-5 – *Aphodius gansuensis* sp. nov.: 3 – epipharynx; 4-5 – male genitalia: 4 – lateral view; 5 – dorsal view.

on each side of shallow median emargination, denticles slightly directed upward; clypeal sides slightly arcuate to small, rounded gena, surface strongly alutaceous and almost impunctate, vertical area shining with fine, deep punctures separated by less than 1 diameter. Pronotum transverse, moderately convex at middle; sides finely margined, straight toward obtuse posterior angles, basal marginal line slightly grooved and finely crenate by dense punctures; surface punctures dense, evenly spaced, mixed fine and moderate, on disc separated by 1 diameter, on sides nearly contiguous. Scutellum widely triangular, shining. Elytra suboval, widest just behind the middle, humeral denticles small, acutely pointed, humeral tubers well indicated; elytral striae fine with shallow punctures weakly crenating inner margins of intervals; intervals nearly flat on disc, convex apically, surface shagreened and finely punctate, sutural interval shining with regular row of punctures. Wings functional. Metasternum alutaceous, rugosely punctate; abdomen shagreened, finely punctate-setose. Legs moderate in length; profemora minutely scabrous, meso- and meta-femora shining with fine scattered punctures and scarce setae, apical setae short, apical spurs thin, nearly equal in length; tarsi as long as tibiae, basal segment of metatarsus 1/3 longer than upper tibial spur and subequal to following three tarsal segments combined. Epipharynx as in Fig. 3. External sexual differences slight, in male metasternum slightly concave, penultimate abdominal sternite shorter than in female; genitalia as in Figs 4-5.

R e m a r k s. *Aphodius gansuensis* can be distinguished from all other species of *Aparamoecius*-group by its distinctly bidentate clypeus. Externally, it appears close to *A. ivani* STEBNICKA (1989, figs 49-50) from Pakistan (Hazara), but the male genitalia show a closer relationship with *A. kanglae* STEBNICKA (1990, figs 16-18, 21) described from eastern Nepal. In the Chinese *A. balangensis* PETROVITZ, the disc of pronotum is more elevated and the pronotal punctures are fewer in number than in *A. gansuensis*.

The species belonging to the *Aparamoecius*-group (STEBNICKA 1994) are characterized by a mosaic of the character states. Since the species are allopatric, the individual ranges are most useful for identification. Morphologically, the male genital characters, the pronotal and elytral characters and, to a lesser degree, the features of ventral sclerites will distinguish the species.

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